# **OLDMAN RIVER DAM**

# Wildlife Control Area Monitoring Report

1994 Report Prepared For:

GOVERNMENT OF THE PROVINCE OF ALBERTA

DEPARTMENT OF THE ENVIRONMENT

Prepared by

R.W. FYFE

April 5, 1994

#### List of Tables

TABLE 1.	PRAIRIE FALCONS IN WILDLIFE CONTROL AREAS	7
TABLE 2.	GOLDEN EAGLE IN WILDLIFE CONTROL AREA	7
TABLE 3.	PRAIRIE FALCONS BEYOND RESERVOIR	7

## **Executive Summary**

The field work investigating the Oldman River Dam Wildlife Control Areas was carried out in March of 1994. These areas were designated in 1993 as a result of data collected during field studies related to the raptor mitigation project relative to the impact of the Oldman River Dam.

Approximately 30 hours were spent in the field specifically to determine if each of the control areas were occupied by breeding pairs during the current year. Five Prairie Falcon territories and one Golden Eagle breeding territory were found to be occupied by one or more birds.

#### 1.0 INTRODUCTION

#### 1.1 Background and Rationale

The Oldman River Dam and surrounding area supports one of the principle concentrations of breeding Prairie Falcons in Alberta. This population has been monitored since the late 1960's and intensively studied since 1989. The area also maintains a good population of Red-tailed Hawks, American Kestrels, Great Horned Owls, and a few pair of Ferruginous Hawks and Golden Eagles.

The construction and subsequent flooding of the Oldman River Dam impacted on the several pair of Prairie Falcons, American Kestrels, Red-tailed Hawks, Great Horned Owls and on the one pair of Ferruginous Hawks nesting in, or adjacent to the reservoir. With the completion of the dam the majority of these breeding birds have now relocated to alternate natural and artificial nest sites in the area.

In 1991-92 environmental hearings were held by a Federal Environmental Panel throughout the province. Several concerns were addressed and several recommendations were made. This project has been initiated in response to the recommendation that the monitoring of the environmental impact on the wildlife in the area should be continued. Observations in the spring of 1993 indicated that unrestricted boating and other recreational activity has the potential to subject resident raptors to severe disturbance throughout the breeding season. As a result Wildlife Control Areas were set up in 1993 specifically to protect nesting Prairie Falcons and Golden Eagles. The project relates specifically to determining the occupancy of Wildlife Control Areas, The field work investigating the Oldman River Dam Wildlife Control Areas was carried out in March of 1994.

Each of the control areas was investigated to determine if they were occupied by breeding pairs during the current year. We first attempted to determine occupancy in each territory included in the wildlife control areas.

# 2.0 Objectives

- To determine the occupancy of the known pairs of breeding Prairie Falcons and Golden Eagles in the Wildlife Control Areas described in 1993.
- To determine the presence of other raptors living in and associated with, the area impacted by the construction and flooding of the Oldman River Dam.

#### 3.0 Field Observations:

#### 3.1 Monitoring nesting raptorial birds utilizing the Wildlife Control Areas

The primary purpose of the project was to determine the current occupancy of birds of prey in the Wildlife Control areas. In order to provide the necessary biological data, monitoring was carried out to obtain specific documentation on the species of concern. The documentation to include field observations relative to occupancy and phenology of raptors observed through March 31, 1994.

Monitoring was carried out from March 21 through March 31 in order to provide data on occupancy. Once it was determined that pairs were establishing nesting territories time was spent to

determine the phenology and potential location of this years nest site. At each visit additional time was spent at the Golden Eagle territory since their cycle is roughly a month in advance of the Prairie Falcons located in the other control areas.

# 3.1.1 Inventory of Breeding Pairs of Prairie Falcons and Golden Eagles in the Wildlife Control Areas.

As detailed in my earlier reports the initial raptor inventories relative to the Oldman River Dam were carried out as part of the Oldman River Wildlife Investigations in the spring and summer of 1985. These inventories located four breeding pair of Prairie Falcons and one pair of Ferruginous Hawks within the proposed reservoir boundaries. Three additional pair of falcons and two pair of Ferruginous Hawks were located upstream and downstream of the proposed reservoir. (Young et al. March 86). Raptor breeding inventories and behavioural studies have been carried out from March through July in 1989, 1990, 1991 and 1992 and from the beginning of April through the end of June in 1993. These field investigations were carried out specifically to locate breeding pairs, non breeding pairs and individuals occupying known breeding territories, or suitable nesting habitat within 16 km. of the proposed reservoir boundaries. The current investigations differ from earlier investigations in that they were carried out specifically to determine occupancy within the Wildlife Control Areas.

### 4.0 RESULTS

#### 4.1 Population Inventory

As indicated in Tables 1. and 2. one pair of Golden Eagles and individuals or pairs of Prairie Falcons were observed in six Wildlife Control Areas between March 21 and March 31,1994. The pair of Golden Eagles were observed setting up at a new location within the Wildlife Control Area and were observed adding on to an old Red Tailed Hawk nest. Single birds were observed at three of the territories and courting pairs at the other two Prairie Falcon nesting territories in the Wildlife Control Territories. Prairie Falcons were also observed at three of four know territories adjacent to the Oldman River Reservoir.

Table 1.

Prairie Falo	rairie Falcons in Wildlife Control Areas				
Nest Site	Pairs	Individuals			
Mercury		yes			
Langs		yes			
Days		yes			
Maloff	yes				
Stevicks		yes			

Table 2.

Golden Ea	Golden Eagle in Wildlife Control Area				
Nest Site	Pairs	Individuals			
Horseshoe Canyon	yes				

Table 3.

Prairie Falcons beyond reservoir				
Nest Site	Pairs	Individuals		
Castle Dairy		yes		
Old Bridge		yes		
Fairbrothers		?		
1st Porcupine	yes			

#### 5.0 DISCUSSION

#### 5.1 Prairie Falcons

Prairie Falcons were observed at all of the Control Areas designated to be set aside for this species. Although pairs were only observed at two of the territories this is not really an indication of the number of territories that will be occupied during the current breeding season as it is still early in the nesting season. The fact that birds were seen at all territories is a better indication of the potential for this year provided they are not disturbed during the establishment of the nest sites. Pairing normally takes place thru March and April.

#### 5.2 Golden Eagles

This is the fourth year that Golden eagles have been observed at this territory. In 1991 on several occasions during the spring and summer a single bird was observed in the territory. In 1992 a pair of Eagles returned to the territory and successfully reared one youngster. In 1993 a pair returned and initiated nesting and were observed incubating early in Aprilonly to desert as a result of disturbanceby power boats. The fact that the Golden Eagles have returned to the territory and is nest building once again is a good indication that this pair will attempt to breed during this breeding season.

#### 6.0 Recommendations:

With the documentation of the breeding pairs in the control areas the areas should be designated as soon as possible so as to minimize disturbance during the breeding season.